

## CTR Employer Survey Report

Thank you for completing your Commute Trip Reduction survey. This report contains the survey results.

**Employer Id :** E71456

**Employer :** The Boeing Company

**Worksite :** The Boeing Company -  
Frederickson

**Street :** 18001 Se Canyon Rd E

**Jurisdiction :** Unincorporated Pierce County

**Survey Date :** 5/8/2016

### SAMPLING

**Survey Type :** Online

**Response Rate :** 62%

### Drive Alone & One-Way VMT Rates at this Worksite

**Drive Alone :** 93.3%

**One-Way VMT per employee :** 17.0

### Employees and Survey Response Information

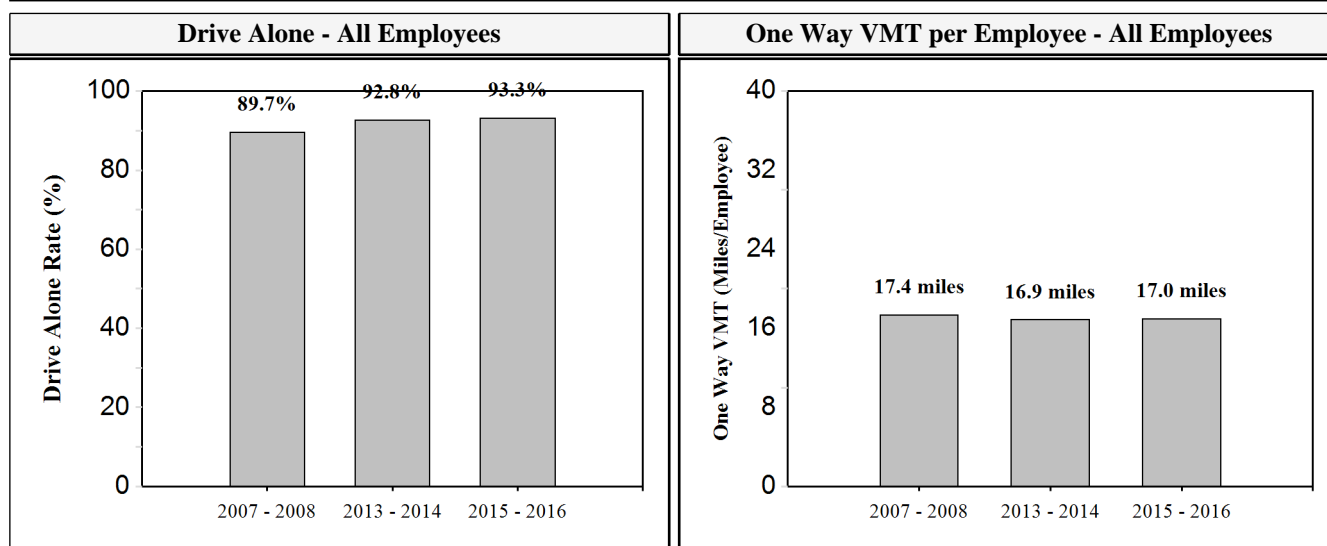
**Reported Total Employees at Worksite:** 1,666

**Surveys Distributed :** 1,274

**Surveys Returned :** 795

**Surveys Returned by CTR Affected Employees :** 392

**Total Estimated CTR - Affected Employees at Worksite :** 628



### Site History and Goal

Cycle	Drive Alone - All	Drive Alone - CTR Affected	VMT / Employee - All	VMT / Employee - CTR Affected
2007 - 2008	89.7%	89.5%	17.4	16.7
2009 - 2010	87.7%	87.7%	17.3	17.3
2011 - 2012	96.2%	98.2%	17.1	18.2
2013 - 2014	92.8%	94.4%	16.9	16.9
2015 - 2016	93.3%	93.9%	17.0	17.0
2017 - 2018	N/A	N/A	N/A	N/A
2019 - 2020	N/A	N/A	N/A	N/A
Goal	TBD	TBD	TBD	TBD
Percent Change	4.0%	4.9%	-2.3%	1.8%

## Comparison Between Rates With and Without Fill-In

The survey response rate is indicated on Page 1. To encourage a response rate of at least 70%, additional drive alone trips are added to survey results for worksites with a response rate of less than 70%. For these worksites it is assumed that non-responding employees between the actual response rate and 70% drive alone 5 days a week. These additional trips represent the "Fill-In" applied. Note that fill-in is not applied to a worksite's first survey in the 2007 to 2012 cycle (their baseline survey).

	2007 - 2008	2013 - 2014	2013 - 2014 Without Fill In	2015 - 2016	2015 - 2016 Without Fill In
Drive Alone - All Employees*	89.7%	92.8%	92.8%	93.3%	93.3%
Drive Alone - CTR Affected Employees*	89.5%	94.4%	94.4%	93.9%	93.9%
VMT/Employee - All Employees	17.4	16.9	16.9	17.0	17.0
VMT/Employees - CTR Affected Employees	16.7	16.9	16.9	17.0	17.0

\* Drive alone rate includes one person motorcycles.

## GHG Emissions: Total for Drive Alone, Carpools, Vanpools

### Annual Greenhouse Gas Emissions (Metric Tons CO2e) for Roundtrip Commute\*

Value	2007 - 2008	2013 - 2014	2015 - 2016
Emissions for Surveyed Employees	4,346	2,642	3,126
Estimated Emissions for Total Employment	6,691	6,651	6,552

\* Estimated based on VMT from commuters driving alone, carpooling, vanpooling, or motorcycling, without fill-in applied.

## Bus Transit Passenger Miles and Rail Transit Passenger Miles\*

Annual Transit Passenger Miles (includes Roundtrip Commute)	2007 - 2008	2013 - 2014	2015 - 2016
Bus Annual Passenger Miles - Estimated for Total Employment	34,640	23,917	2,305
Bus Annual Passenger Miles - Surveyed Employees	22,500	9,500	1,100
Ferry Annual Passenger Miles - Estimated for Total Employment	0	32,729	43,169
Ferry Annual Passenger Miles - Surveyed Employees	0	13,000	20,600
Train/Light Rail/Streetcar Annual Passenger Miles - Estimated for Total Employment	770	0	0
Train/Light Rail/Streetcar Annual Passenger Miles - Surveyed Employees	500	0	0

\* Transit passenger miles can be used to gauge changes in transit usage, and also to calculate greenhouse gas emissions from transit commute trips. However, emissions attributable to transit vary widely, depending on the efficiency/energy source of transit vehicles and transit vehicle passenger load (typically ranging from 0.1 to 0.9 pounds CO2e emissions/passenger mile). Employers are strongly encouraged to contact their local transit agencies for more precise information on GHG emissions for their transit trips. If nothing else is available, the value of 0.47 pounds (0.00021 metric tons) per passenger mile can be used to estimate CO2e emissions for bus transit, and 0.39 pounds (0.00018 metric tons) CO2e emissions per passenger mile for train/light rail/streetcar.

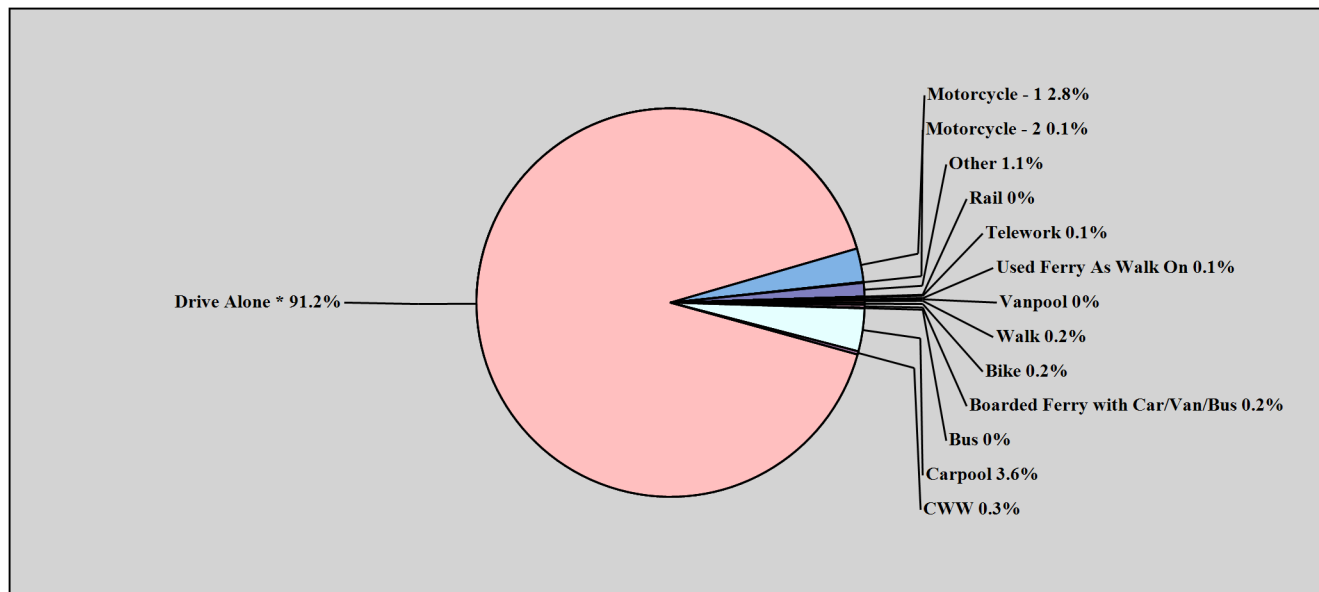
**Q3.**

<b>One way, how many miles do you commute from home to your usual work location?</b>
<b>Average one-way distance home to work: 18.1 miles</b>

## Commute Trips By Mode - All Employees

Q.4a: Last week, what type of transportation did you use each day to commute TO your usual work location? (Mode used for the longest distance.)

Mode Split - All Employees



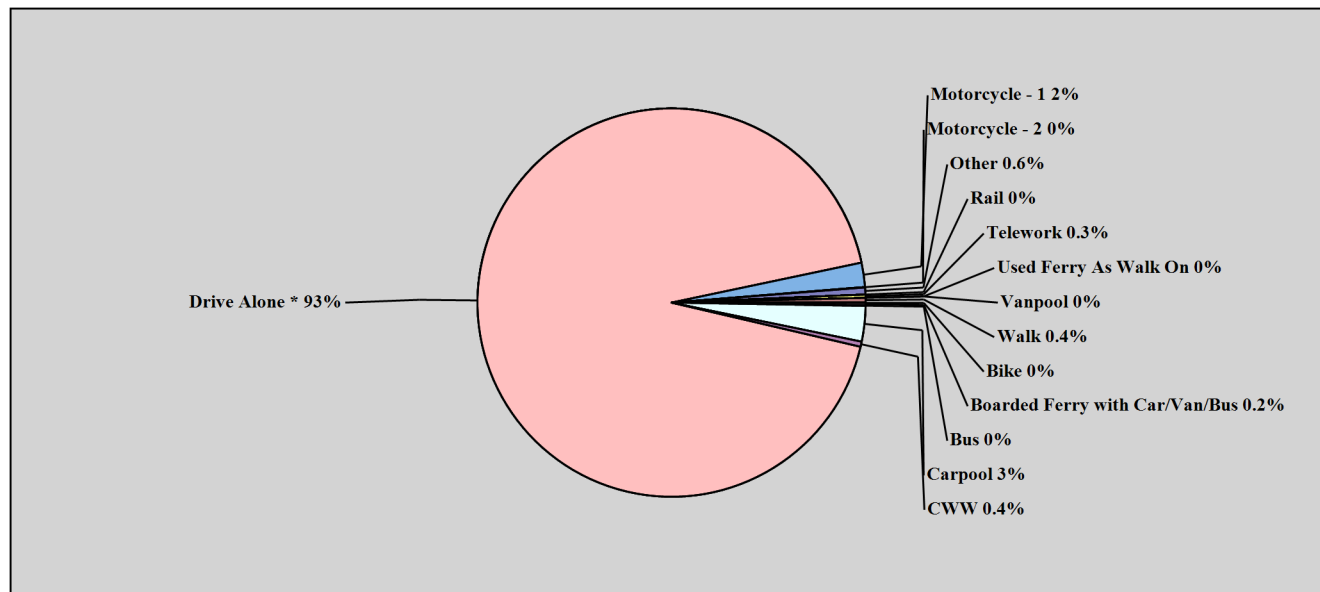
Mode	Trips During This Survey Week	% of Trips During This Survey Week	% of Trips During Previous Survey Week	Employees Who Used This Mode at Least Once During This Survey Week	% of Employees Who Used This Mode at Least Once During This Survey Week	% of Employees Who Used This Mode at Least Once During Previous Survey Week
Drive Alone *	4,424	91.2%	93.8%	740	93.1%	93.7%
Carpool	173	3.6%	3.6%	41	5.2%	5.2%
Vanpool	0	0.0%	0.1%	0	0.0%	0.2%
Motorcycle - 1	135	2.8%	0.7%	43	5.4%	1.7%
Motorcycle - 2	4	0.1%	0.0%	3	0.4%	0.0%
Bus	2	0.0%	0.1%	2	0.3%	0.3%
Rail	0	0.0%	0.0%	0	0.0%	0.0%
Bike	9	0.2%	0.2%	3	0.4%	0.6%
Walk	10	0.2%	0.1%	3	0.4%	0.6%
Telework	7	0.1%	0.4%	4	0.5%	1.1%
CWW	13	0.3%	0.2%	7	0.9%	1.1%
Boarded Ferry with Car/Van/Bus	12	0.2%	0.1%	2	0.3%	0.3%
Used Ferry As Walk On	7	0.1%	0.0%	1	0.1%	0.0%
Other	55	1.1%	0.9%	13	1.6%	1.8%

\* Drive alone mode includes fill-in, where applicable.

## Commute Trips By Mode - Affected Employees

Q.4a: Last week, what type of transportation did you use each day to commute TO your usual work location? (Mode used for the longest distance.)

Mode Split - Affected Employees



Mode	Trips During This Survey Week	% of Trips During This Survey Week	% of Trips During Previous Survey Week	Employees Who Used This Mode at Least Once During This Survey Week	% of Employees Who Used This Mode at Least Once During This Survey Week	% of Employees Who Used This Mode at Least Once During Previous Survey Week
Drive Alone *	2,395	93.0%	95.9%	371	94.6%	95.6%
Carpool	76	3.0%	1.6%	19	4.8%	3.5%
Vanpool	0	0.0%	0.2%	0	0.0%	0.3%
Motorcycle - 1	52	2.0%	0.5%	18	4.6%	1.8%
Motorcycle - 2	1	0.0%	0.0%	1	0.3%	0.0%
Bus	1	0.0%	0.1%	1	0.3%	0.6%
Rail	0	0.0%	0.0%	0	0.0%	0.0%
Bike	1	0.0%	0.1%	1	0.3%	0.6%
Walk	10	0.4%	0.2%	3	0.8%	0.9%
Telework	7	0.3%	0.4%	4	1.0%	1.5%
CWW	11	0.4%	0.2%	6	1.5%	1.8%
Boarded Ferry with Car/Van/Bus	5	0.2%	0.1%	1	0.3%	0.3%
Used Ferry As Walk On	0	0.0%	0.0%	0	0.0%	0.0%
Other	15	0.6%	0.6%	4	1.0%	2.1%

\* Drive alone mode includes fill-in, where applicable.

### Alternative Modes - Number of Employees Who Used a Non-Drive Alone Mode:

Non-Drive Alone Number Of Days	Exactly this # of Employees	Exactly this % of Employees	At least # of Employees	At least % of employees
0 Day	723	91%	795	100%
1 Days	8	1%	72	9%
2 Days	17	2%	64	8%
3 Days	5	1%	47	6%
4 Days	5	1%	42	5%
5 Days	21	3%	37	5%
6 or More Days	16	2%	16	2%

### Work Schedules By Group - All Employees (This table shows the relationship between work schedule and commute mode)

Employees who worked:	Drive Alone 5 days / week		Drive Alone 3 or 4 days / week		Used Bus At Least 3 days / week		Carpooled At Least 3 days / week		Used Rail At Least 3 days / week		Vanpooled At Least 3 times / week		Biked or Walked At Least 3 Days / week		Used 'Other' Modes At Least 3 Days / week		Used Non-Drive Alone At Least 3 Days / week	
5 days a week	445	61.5%	31	4.3%	0	0%	30	4.1%	0	0%	0	0%	3	0.4%	4	0.6%	39	5.4%
4 days a week (4/10s)	3	23.1%	9	69.2%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
3 days a week	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%
9 days in 2 weeks (9/80)	6	66.7%	2	22.2%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	22.2%
7 days in 2 weeks	2	13.3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	13.3%	2	13.3%
Other	3	10.3%	0	0%	0	0%	1	3.4%	0	0%	0	0%	0	0%	1	3.4%	2	6.9%

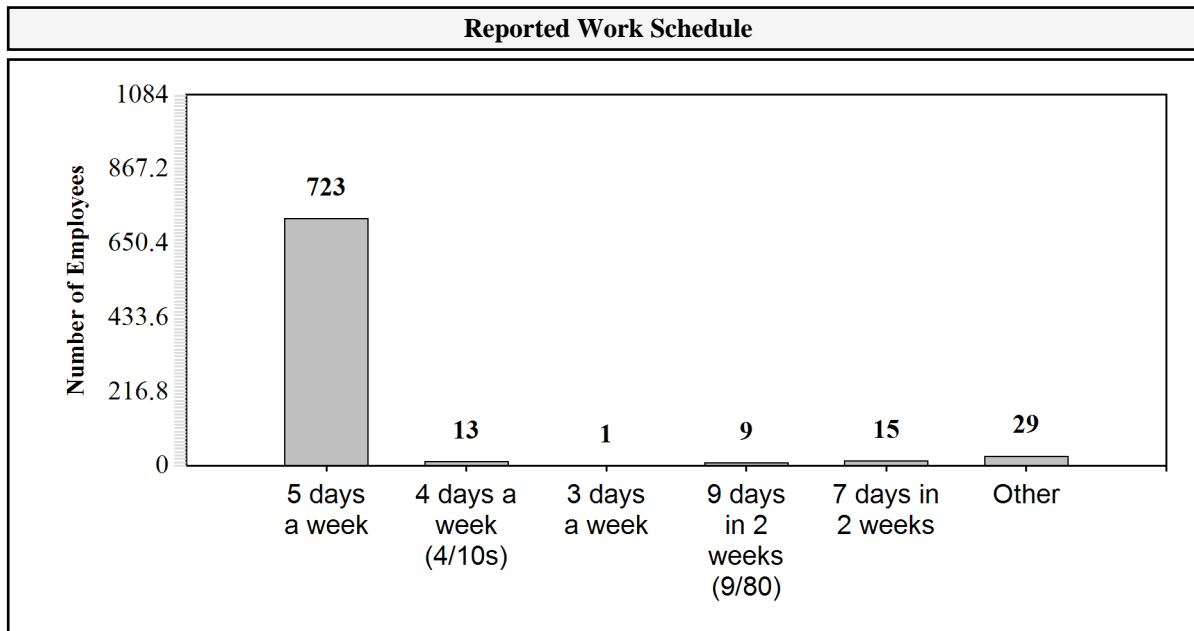
## Count by Occupancy of Carpools, Vanpools, and Motorcycles

**Q.4b** If you used a carpool or vanpool as part of your commute, or if you ride a motorcycle, how many people (age 16 or older) are usually in the vehicle?

Ridesharing Occupancy	Mode	Response Count
1	Motorcycle	138
2	Motorcycle	3
2	Carpool	172
3	Carpool	0
4	Carpool	0
5	Carpool	0
>5	Carpool	1
<5	Vanpool	0
5	Vanpool	0
6	Vanpool	0
7	Vanpool	0
8	Vanpool	0
9	Vanpool	0
10	Vanpool	0
11	Vanpool	0
12	Vanpool	0
13	Vanpool	0
14	Vanpool	0
15	Vanpool	0

## Reported Work Schedule - All Employees

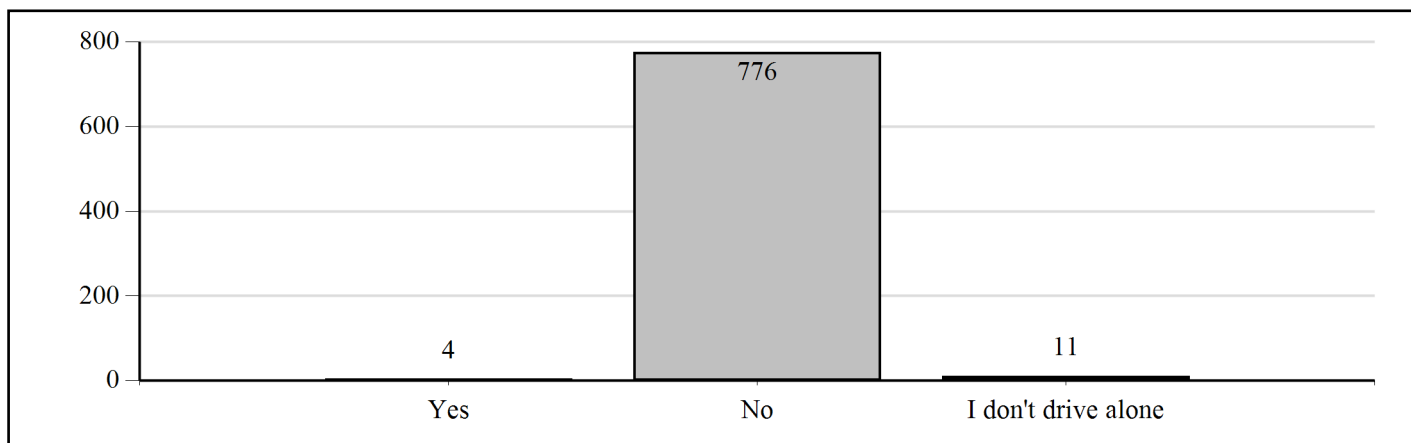
Q.5 Which of the following best describes your work schedule?



Reported Work Schedule	# Of Responses	% Of Employees
5 days a week	723	91.5%
4 days a week (4/10s)	13	1.6%
3 days a week	1	0.1%
9 days in 2 weeks (9/80)	9	1.1%
7 days in 2 weeks	15	1.9%
Other	29	3.7%

## Parking and Telework

**Q.9: On the most recent day that you drove alone to work, did you pay to park? (Mark "yes" if you paid that day, if you prepaid, if you are billed later, or if the cost of parking is deducted from your paycheck.)**



**Q.10: How many days do you typically telework?**

Telework Frequency	# of Responses	% of Responses
No Answer/Blank	2	0.3%
I don't telework	726	91.3%
Occasionally, on an as-needed basis	55	6.9%
1-2 days/month	4	0.5%
1 day/week	3	0.4%
2 days/week	3	0.4%
3 days/week	2	0.3%



## Reasons for driving alone to work/not driving alone to work

**Q11. When you do not drive alone to work, what are the three most important reasons?**

Question Text	# of Responses	% of Responses
Other	252	22.7%
To save money	218	19.7%
Financial incentives for carpooling, bicycling or walking.	128	11.6%
Personal health or well-being	103	9.3%
To save time using the HOV lane	100	9.0%
Environmental and community benefits	85	7.7%
Driving myself is not an option	51	4.6%
Emergency ride home is provided	44	4.0%
Free or subsidized bus, train, vanpool pass or fare benefit	38	3.4%
I have the option of teleworking	34	3.1%
Cost of parking or lack of parking	26	2.3%
Preferred/reserved carpool/vanpool parking is provided	25	2.3%
I receive a financial incentive for giving up my parking space	4	0.4%

**Q12. When you drive alone to work, what are the three most important reasons?**

Question Text	# of Responses	% of Responses
I like the convenience of having my car	506	28.6%
My commute distance is too short	323	18.3%
Riding the bus or train is inconvenient or takes too long	264	14.9%
Family care or similar obligations	188	10.6%
Other	186	10.5%
Bicycling or walking isn't safe	146	8.3%
My job requires me to use my car for work	78	4.4%
I need more information on alternative modes	57	3.2%
There isn't any secure or covered bicycle parking	21	1.2%

**Employee Transit Use - All Employees**

**Q 13. Please indicate the number of one-way transit or walk-on ferry trips you took last week on each system listed below (for any purpose, not just getting to and from work). Please select "Other" if your transit isn't listed.**

Trips/Week	Employees Making This Many Transit Trips in a Week									
	Community Transit	Everett Transit	Intercity Transit	King County Metro	Kitsap Transit	Pierce Transit	Sound Transit	Whatcom Transportation Authority	Ferry as Walk-On	Other
1	1	0	0	2	0	3	1	0	2	10
2	0	0	0	1	0	2	1	0	3	2
3	1	0	0	0	0	1	0	0	0	1
4	0	0	0	0	0	0	0	0	1	1
5	0	0	0	0	0	0	0	0	0	10
6	0	0	0	0	0	0	0	0	0	0
7	1	0	0	0	0	0	0	0	0	1
8	0	0	0	1	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	2
11 or more	0	0	0	0	0	0	0	0	0	0
# Of Employees using Transit	3	0	0	4	0	6	2	0	6	27
Total One-Way Transit Trips Per Week	11	0	0	12	0	10	3	0	12	98

### Employee Transit Use - Affected Employees

**Q 13. Please indicate the number of one-way transit or walk-on ferry trips you took last week on each system listed below (for any purpose, not just getting to and from work). Please select "Other" if your transit isn't listed.**

Trips/Week	Employees Making This Many Transit Trips in a Week									
	Community Transit	Everett Transit	Intercity Transit	King County Metro	Kitsap Transit	Pierce Transit	Sound Transit	Whatcom Transportation Authority	Ferry as Walk-On	Other
1	0	0	0	2	0	3	0	0	2	2
2	0	0	0	0	0	1	1	0	0	1
3	1	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	0	0	1
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	1
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	1
11 or more	0	0	0	0	0	0	0	0	0	0
# Of Employees using Transit	1	0	0	2	0	4	1	0	2	8
Total One-Way Transit Trips Per Week	3	0	0	2	0	5	2	0	2	33

## Commute Mode By ZipCode for All Employees

Q8. What is your home zip code?

Home Zip code	Total Employees	Employee Percentage	Weekly Count of Trips By Mode												
			Drive Alone	Carpool	Vanpool	Motorcycle	Bus	Train	Bike	Walk	Telework	CWW	Ferry (Car/Van/Bus)	Ferry (walk-on)	Other
	2	0.25%	7	0	0	0	0	0	0	0	0	0	0	0	0
96744	1	0.13%	1	1	0	1	1	0	0	0	0	0	0	0	0
98001	9	1.13%	52	0	0	0	0	0	0	0	0	0	0	0	0
98002	9	1.13%	49	0	0	0	0	0	0	0	0	0	0	0	0
98003	12	1.51%	51	10	0	0	0	0	0	0	0	0	0	0	0
98006	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98010	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98021	2	0.25%	10	0	0	0	0	0	0	0	0	0	0	0	0
98022	19	2.39%	96	0	0	0	0	0	0	0	0	1	0	0	10
98023	12	1.51%	66	0	0	0	0	0	0	0	0	3	0	0	0
98030	7	0.88%	39	0	0	0	0	0	0	0	0	0	0	0	2
98031	5	0.63%	24	0	0	0	0	0	0	0	0	0	0	0	7
98032	4	0.50%	18	4	0	0	0	0	0	0	0	0	0	0	0
98038	4	0.50%	22	0	0	0	0	0	0	0	0	0	0	0	0
98042	8	1.01%	40	2	0	0	0	0	0	0	0	0	0	0	0
98043	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98047	4	0.50%	23	0	0	0	0	0	0	0	0	0	0	0	0
98056	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98057	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98058	2	0.25%	10	0	0	0	0	0	0	0	0	0	0	0	0
98059	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98092	18	2.26%	83	7	0	2	0	0	0	0	0	0	0	0	5
98107	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98115	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98118	4	0.50%	17	7	0	0	0	0	0	0	0	0	0	0	0
98121	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0



98146	2	0.25%	10	0	0	0	0	0	0	0	0	0	0	0	0
98166	2	0.25%	7	0	0	3	0	0	0	0	0	0	0	0	0
98168	3	0.38%	21	0	0	0	0	0	0	0	0	0	0	0	0
98198	3	0.38%	16	0	0	0	0	0	0	0	0	0	0	0	0
98204	1	0.13%	7	0	0	0	0	0	0	0	0	0	0	0	0
98303	1	0.13%	0	0	0	0	0	0	0	0	0	0	5	0	0
98304	2	0.25%	0	10	0	0	0	0	0	0	0	0	0	0	0
98321	20	2.52%	98	15	0	0	0	0	0	0	0	0	0	0	0
98323	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98328	23	2.89%	116	16	0	2	0	0	0	0	0	0	0	0	0
98329	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98330	1	0.13%	7	0	0	0	0	0	0	0	0	0	0	0	0
98332	4	0.50%	18	0	0	2	0	0	0	0	0	0	0	0	0
98333	1	0.13%	2	0	0	3	0	0	0	0	0	0	0	0	0
98335	4	0.50%	19	0	0	0	0	0	0	0	0	1	0	0	0
98338	93	11.70%	447	26	0	7	0	0	0	0	2	4	7	0	2
98349	2	0.25%	10	0	0	0	0	0	0	0	0	0	0	0	0
98351	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98354	2	0.25%	7	0	0	3	0	0	0	0	0	0	0	0	0
98355	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98356	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98360	19	2.39%	94	5	0	4	0	0	0	0	0	0	0	0	0
98367	5	0.63%	21	3	0	0	0	0	0	0	0	0	0	0	0
98370	2	0.25%	11	0	0	0	0	0	0	0	0	0	0	0	0
98371	11	1.38%	51	0	0	3	0	0	0	0	0	0	0	0	0
98372	21	2.64%	111	0	0	2	0	0	0	0	0	0	0	0	0
98373	31	3.90%	179	0	0	2	0	0	0	0	0	0	0	0	0
98374	40	5.03%	202	12	0	0	0	0	0	0	0	2	0	7	0
98375	55	6.92%	230	12	0	11	0	0	9	10	0	0	0	0	13
98385	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98387	63	7.92%	321	11	0	25	0	0	0	0	0	1	0	0	0
98388	2	0.25%	10	0	0	2	0	0	0	0	0	0	0	0	0
98390	4	0.50%	15	4	0	0	0	0	0	0	0	0	0	0	0
98391	38	4.78%	184	9	0	12	0	0	0	0	4	0	0	0	0
98396	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98402	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98404	5	0.63%	27	0	0	2	0	0	0	0	0	0	0	0	0



98405	1	0.13%	0	0	0	0	0	0	0	0	0	0	0	0	0
98406	5	0.63%	24	0	0	5	0	0	0	0	0	0	0	0	0
98407	6	0.75%	32	0	0	0	0	0	0	0	0	0	0	0	0
98408	1	0.13%	6	0	0	0	0	0	0	0	0	0	0	0	0
98409	5	0.63%	30	0	0	0	0	0	0	0	0	0	0	0	0
98418	5	0.63%	27	0	0	0	0	0	0	0	0	0	0	0	0
98422	3	0.38%	16	0	0	0	0	0	0	0	0	0	0	0	0
98424	3	0.38%	16	0	0	0	0	0	0	0	0	0	0	0	0
98443	3	0.38%	18	0	0	2	0	0	0	0	0	0	0	0	0
98444	17	2.14%	97	2	0	0	0	0	0	0	0	0	0	0	1
98445	33	4.15%	163	10	0	16	0	0	0	0	0	0	0	0	0
98446	12	1.51%	68	0	0	0	0	0	0	0	0	0	0	0	0
98455	1	0.13%	7	0	0	0	0	0	0	0	0	0	0	0	0
98465	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98466	5	0.63%	25	0	0	0	1	0	0	0	0	0	0	0	0
98467	3	0.38%	18	0	0	0	0	0	0	0	0	0	0	0	0
98498	10	1.26%	49	2	0	5	0	0	0	0	0	0	0	0	0
98499	2	0.25%	10	0	0	0	0	0	0	0	0	0	0	0	0
98501	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98502	1	0.13%	7	0	0	0	0	0	0	0	0	0	0	0	0
98503	6	0.75%	27	0	0	0	0	0	0	0	0	0	0	0	8
98508	1	0.13%	0	0	0	0	0	0	0	0	0	0	0	0	0
98512	3	0.38%	18	0	0	1	0	0	0	0	0	0	0	0	0
98513	6	0.75%	33	0	0	0	0	0	0	0	0	0	0	0	0
98516	5	0.63%	25	0	0	0	0	0	0	0	0	0	0	0	0
98532	2	0.25%	11	0	0	0	0	0	0	0	0	0	0	0	0
98548	1	0.13%	0	5	0	0	0	0	0	0	0	0	0	0	0
98558	1	0.13%	7	0	0	0	0	0	0	0	0	0	0	0	0
98564	1	0.13%	6	0	0	0	0	0	0	0	0	0	0	0	0
98569	2	0.25%	10	0	0	0	0	0	0	0	0	0	0	0	0
98570	1	0.13%	3	0	0	0	0	0	0	0	1	1	0	0	0
98576	3	0.38%	16	0	0	0	0	0	0	0	0	0	0	0	0
98580	31	3.90%	159	0	0	22	0	0	0	0	0	0	0	0	0
98596	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98597	11	1.38%	54	0	0	4	0	0	0	0	0	0	0	0	0
98791	1	0.13%	5	0	0	0	0	0	0	0	0	0	0	0	0
98926	1	0.13%	4	0	0	0	0	0	0	0	0	0	0	0	0



98991	1	0.13%	0	0	0	0	0	0	0	0	0	0	0	0	7
-------	---	-------	---	---	---	---	---	---	---	---	---	---	---	---	---